

**PROJECT DESCRIPTION**

THIS PROJECT INVOLVES UPGRADING THE EXISTING ICB TO A FULL COLOR TRAFFIC SIGNAL AT THE INTERSECTION OF MD 108 (OLNEY SANDY SPRING ROAD) AND BROOKE ROAD/MEETING HOUSE ROAD IN MONTGOMERY COUNTY. MD 108 IS ASSUMED TO RUN IN A EAST-WEST DIRECTION.

**INTERSECTION OPERATION**

THIS INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE FULL-TRAFFIC-ACTUATED MODE WITH AN ALTERNATE PEDESTRIAN PHASE FOR THE WEST LEG OF THE INTERSECTION AND A FIREHOUSE PRE-EMPTION PHASE FOR SOUTHBOUND BROOKE ROAD.

**CONTROLLER REQUIREMENTS**

A FULL-TRAFFIC-ACTUATED EIGHT PHASE TRAFFIC SIGNAL CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE FURNISHED BY SHA/MONTGOMERY COUNTY AND INSTALLED BY THE CONTRACTOR. VIDEO DETECTION INTERFACE EQUIPMENT SHALL BE FURNISHED BY SHA. TWO WIRE APS CENTRAL CONTROL UNIT SHALL BE FURNISHED BY THE CONTRACTOR AND INSTALLED BY MONTGOMERY COUNTY. DISCRIMINATOR MODULE, 4 CHANNEL, NO. 764 SHALL BE RELOCATED BY MONTGOMERY COUNTY AND INSTALLED IN THE PROPOSED CONTROLLER CABINET. ALL CONTROLLER CABINET WIRING WILL BE PERFORMED BY MONTGOMERY COUNTY FORCES. CONTACT KAMAL HAMUD AT (240) 777-8761 72 HOURS IN ADVANCE OF INTENDED WORK. MONTGOMERY COUNTY SHALL WIRE RELAY PACKAGE TO CONTROL ADVANCED HAZARD IDENTIFICATION BEACONS.

**CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:**

MR. JEFFREY WENTZ ASSISTANT DISTRICT ENGINEER-TRAFFIC PHONE: (301) 513-7358  
 MR. KEVIN NOWAK ASSISTANT DISTRICT ENGINEER - CONSTRUCTION (301) 513-7385  
 MR. WAYNE MOWDY ASSISTANT DISTRICT ENGINEER - MAINTENANCE (301) 513-7304

**CONTACT PERSONS FOR OOTS ARE AS FOLLOWS:**

MR. RICHARD L. DAFF, SR. CHIEF, TRAFFIC OPERATIONS DIVISION PHONE: (410)787-7630  
 MR. ROBERT SNYDER ASSISTANT DIVISION CHIEF TRAFFIC OPERATIONS (410)787-7630  
 MR. ED RODENHIZER CHIEF, SIGNAL OPERATIONS (410)787-7650  
 MR. EUGENE BAILEY CHIEF, SIGN OPERATIONS (410)787-7676

**CONTACT PERSONS FOR MONTGOMERY COUNTY ARE AS FOLLOWS:**

MR. KAMAL HAMUD PHONE: (240) 777-8761  
 MR. KEITH LORD PHONE: (301) 279-1291

**EQUIPMENT LIST "A"**

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
9000	RELOCATE EXISTING OPTICOM DISCRIMINATOR MODULE TO PROPOSED TRAFFIC SIGNAL CABINET	EA	1
9000	RELAY PACKAGE	EA	1
9004	10 FOOT MINI MAST ARM	EA	1
9042	CONTROLLER ASCII WITH TELEMETRY	EA	1
9044	CONTROLLER CABINET, SIZE 6	EA	1
9086	VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS	EA	1
9571	SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN 2 - W3-3(2) (120"x60") FY 1 - R3-5 (30"x36")	SF	108

**EQUIPMENT LIST "B"**

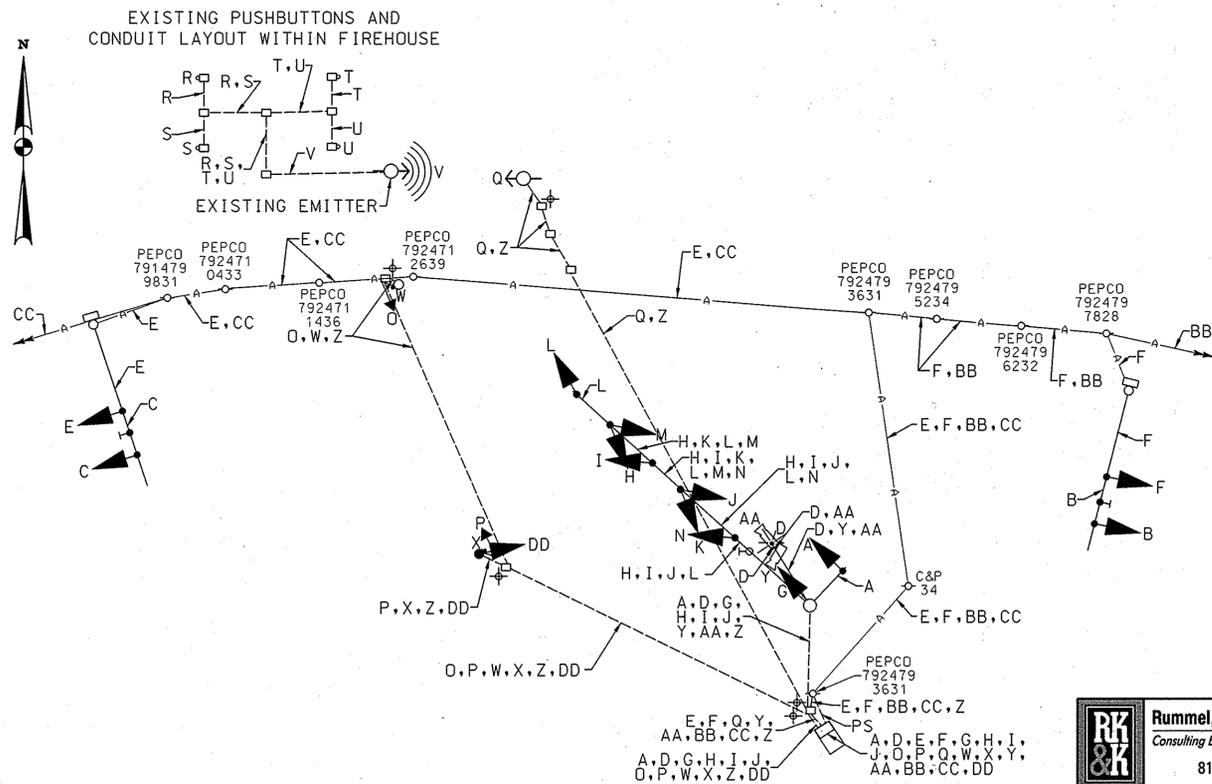
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1003	MAINTENANCE OF TRAFFIC	EA	1
5001	F & I HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROWS	EA	2
5003	REMOVE EXISTING PERMANENT PAVEMENT MARKINGS	EA	2
8001	2 WIRE CENTRAL CONTROL UNIT	EA	1
8007	F & I AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGN	EA	2
8008	BREAKAWAY PEDESTAL POLE (ANY SIZE)	EA	1
8013	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD	EA	2
8021	REMOVE & DISPOSE MATERIAL & EQUIPMENT PER ASSIGNMENT	EA	1
8031	DISCONNECT, PULL-BACK & REROUTE CABLE	LF	60
8038	INSTALL OVERHEAD OR GROUND MOUNTED SIGN	SF	108
8050	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	36
8056	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	35
8057	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	200
8058	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TC	LF	100
8065	INSTALL CONTROLLER AND CABINET - BASE MOUNTED	EA	1
NEG	INSTALL 10 FOOT STEEL MINI MAST ARM	EA	1
NEG	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE	EA	1
NEG	RELOCATE VIDEO DETECTION CAMERA	EA	1
NEG	F & I 39 INCH REMOVABLE RUBBER CURB SECTION (BLACK WITH WHITE REFLECTIVE TAPE)	LF	87.75

**EQUIPMENT LIST "C"**

C. EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076.

SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY OF THE CONTRACTOR.



**PHASING CHART**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PHASE 2 & 6	DARK	DARK	G	G	DARK	DARK	G	G	G	R	R	R	R	R	DW	DW
2 & 6 CLEARANCE	FL/Y	FL/Y	G	G	DARK	DARK	G	G	G	R	R	R	R	R	DW	DW
2 & 6 CHANGE	FL/Y	FL/Y	Y	Y	FL/Y	FL/Y	Y	Y	Y	R	R	R	R	R	DW	DW
PHASE 4 & 8	FL/Y	FL/Y	R	R	FL/Y	FL/Y	R	R	R	G	G	G	G	G	DW	DW
4 & 8 CHANGE	FL/Y	FL/Y	R	R	FL/Y	FL/Y	R	R	R	Y	Y	Y	Y	Y	DW	DW
PHASE 4 ALT	FL/Y	FL/Y	R	R	FL/Y	FL/Y	R	R	R	G	G	G	G	G	WALK	WALK
PED CLEARANCE/COUNTDOWN	FL/Y	FL/Y	R	R	FL/Y	FL/Y	R	R	R	G	G	G	G	G	FL/DW	FL/DW
4 ALT CHANGE	FL/Y	FL/Y	R	R	FL/Y	FL/Y	R	R	R	Y	Y	Y	Y	Y	DW	DW
PRE-EMPTION	FL/Y	FL/Y	R	R	FL/Y	FL/Y	R	R	R	R	R	R	G	G	DW	DW
PRE-EMPTION CHANGE	FL/Y	FL/Y	R	R	FL/Y	FL/Y	R	R	R	R	R	R	Y	Y	DW	DW
FLASHING OPERATION	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK								

**WIRING KEY**

- A,DD 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- B,C 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- D 2-CONDUCTOR ELECTRICAL CABLE TYPE T/C (NO. 12 AWG)
- E,F,G,H,I,J EXISTING 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- K,L,M,N,O,P EXISTING 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- Q EXISTING 4-CONDUCTOR OPTICOM CABLE (NO. 14 AWG) SHIELDED
- R,S,T,U EXISTING 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- V EXISTING SPLICED 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- W,X EXISTING 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- Y,AA EXISTING VIDEO DETECTION CAMERA CONTROL CABLE (100 FT)
- BB,CC EXISTING 12-PAIR INTERCONNECT CABLE (SELF SUPPORTING) (NO. 19 AWG)
- Z EXISTING STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
- PS EXISTING UNDERGROUND POWER SERVICE BY PEPCO
- ⊕ EXISTING GROUND ROD

TOD NO: XX444-14  
 SHA NO: MOS26A58/B58  
 MD 108@ BROOKE RD/MEETING HOUSE RD

**SHA** STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION  
 MD 108 @ BROOKE RD/MEETING HOUSE RD SANDY SPRING, MARYLAND

REVISIONS	GENERAL INFORMATION SHEET		
	SCALE	DATE	CONTRACT NO.
	1"=20'	10-2-2008	XX4445185
	DESIGNED BY	COUNTY	MONTGOMERY
	DRAWN BY	LOGMILE	15010815.79
	CHECKED BY	TIMS NO.	I-746
	FAP NO.	TOD NO.	
	TS NO. 4267C-GI	DRAWING SG - 2 OF 2	SHEET NO. 2 OF 2

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